



RIDOT TMC Unplanned Incident Statistics and Performance Measures 7/1/2009 To 9/30/2009

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is part of our ongoing Performance Measurement effort. Through this effort, we are quantifying the benefits of the ITS program in our state, and are also able to monitor improvements in the efficiency and effectiveness with which we manage roadway incidents. By making these statistics available to you on a monthly basis, we hope that you can learn more about the program and understand the benefit of the service we provide to the Rhode Island motoring public.

These monthly reports represent statistics for unplanned incidents on Rhode Island's roadways. The types of incidents included in the report include disabled vehicles, debris on the roadway, emergency roadwork, and vehicle accidents, including jack-knifed trucks and vehicle spinouts. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (<http://www.tmc.state.ri.us>), including construction and incident information.

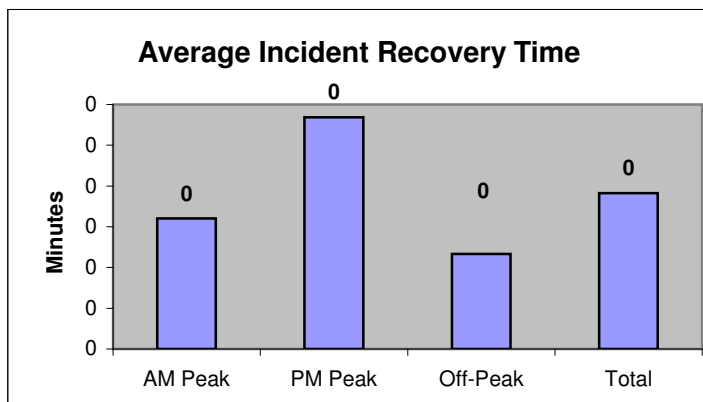
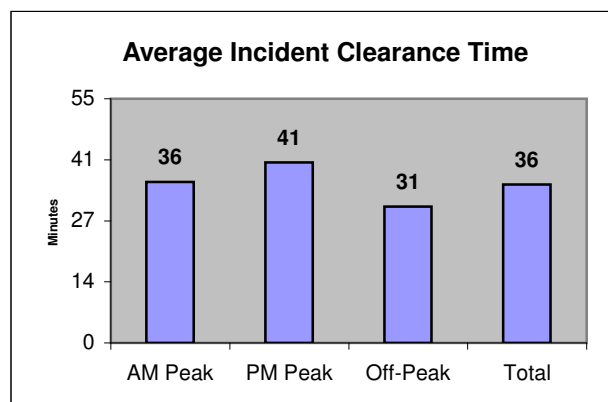
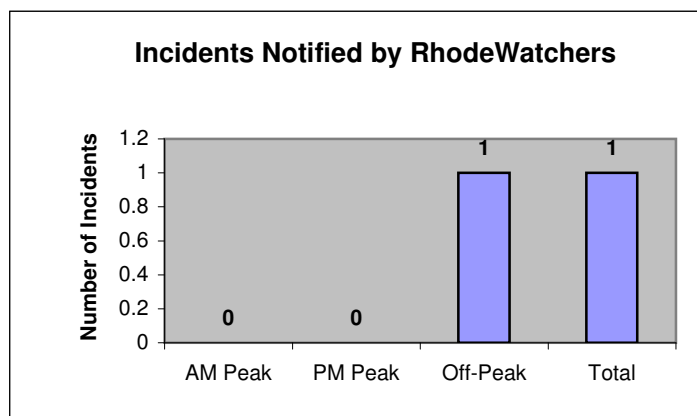
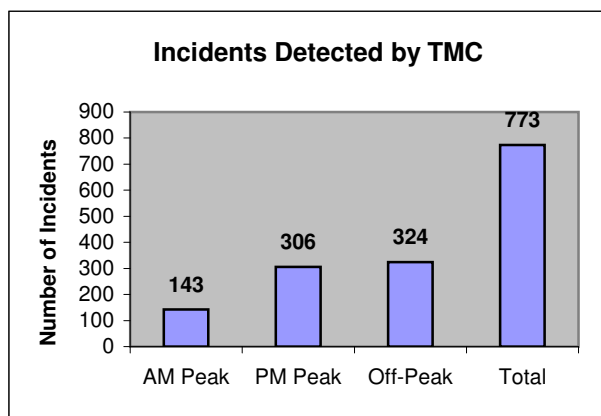
RIDOT TMC Unplanned Incident Statistics and Performance Measures Report

1. Peak Period Incident Statistics*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	146	313	331	790
Avg. Incident Duration (hr:min)	37	41	31	36
Avg. Incident Clearance Time (hr:min)	36	41	31	36
Avg. Incident Recovery Time (hr:min)	0	0	0	0
# Detected by TMC Operators (CCVE)	65	155	145	365
# Detected by TMC, State Police	78	151	179	408
# Notified by RhodeWatchers	0	0	1	1
# of Messages Posted VMS	12	24	22	58
# of Messages Posted DMS	68	104	160	332
# of Messages Posted HAR	54	75	74	203
# of Messages posted Web	123	301	287	711
Avg. Delay Cost**	\$154,974	\$173,579	\$131,296	\$152,424
Total Delay Cost	\$22,626,257	\$54,330,092	\$43,458,991	\$120,415,341

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

** Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.



Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways

Incident Clearance Time is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

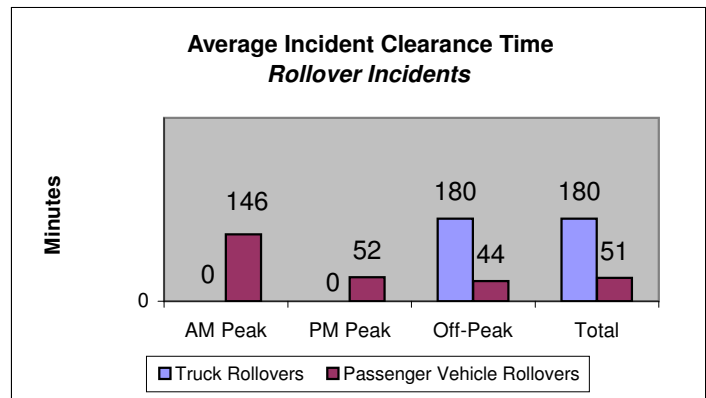
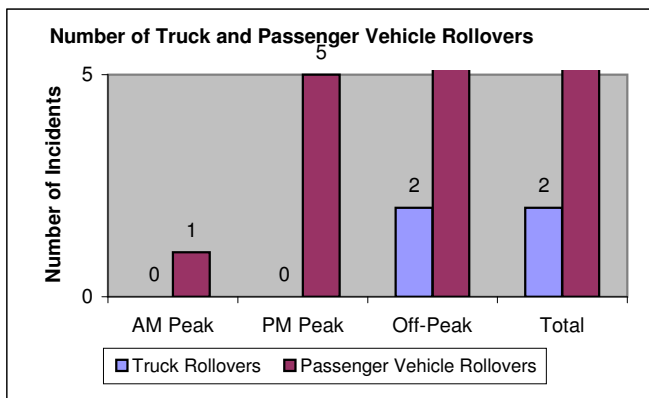
Incident Recovery Time is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.



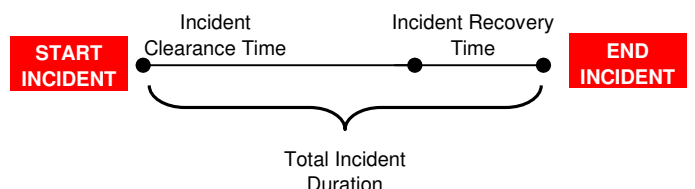
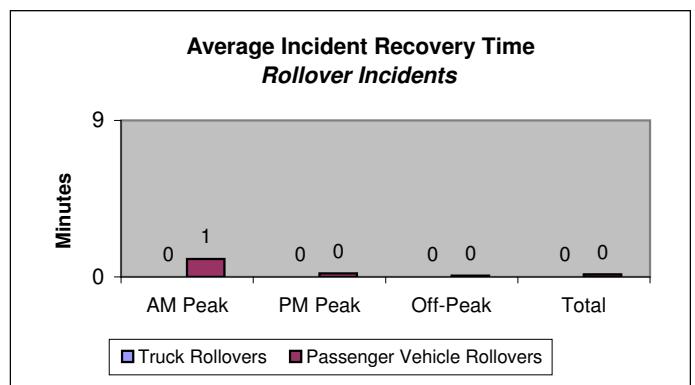
2. Rollover Incident Statistics*

VEHICLES	Trucks				Automobiles			
	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	0	0	2	2	1	5	14	20
Avg. Incident Duration (min)	0	0	180	180	147	52	44	51
Avg. Incident Clearance Time (min)	0	0	180	180	146	52	44	51
Avg. Incident Recovery Time (min)	0	0	0	0	1	0	0	0

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday



Roadway	Exit Number	Number Of Rollovers
Interstate 195 Westbound	2	1
Interstate 295 Northbound	8A	1
Interstate 295 Northbound	6	1
Interstate 295 Northbound	5	1
Interstate 295 Northbound	10	1
Interstate 295 Southbound	3A	1
Interstate 295 Southbound	10	1
Interstate 295 Southbound	5	1
Interstate 95 Northbound	9	1
Interstate 95 Northbound	10	1
Interstate 95 Southbound	4	1
Interstate 95 Southbound	27	1
Interstate 95 Southbound	18	1
Route 1 Southbound	N/A	1
Route 10 Northbound	N/A	1
Route 2 Southbound	N/A	1
Route 3 Westbound	N/A	1
Route 37 Westbound	1A	1
Route 4 Southbound	6	1
Route 6 Eastbound	N/A	1
Route 6 Westbound	N/A	1
Route 6 Westbound	N/A	1
TOTAL		22



3. Incidents by Severity Level

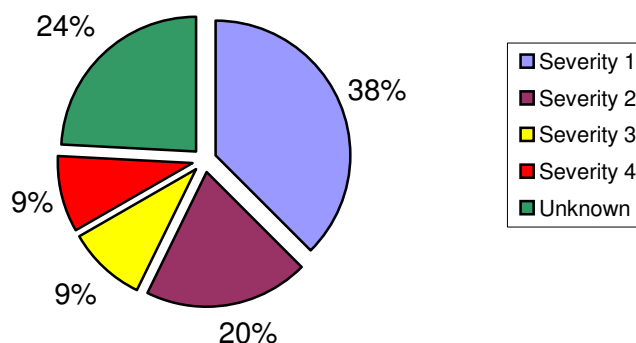
Severity Level*	No. of Incidents
Severity 0	341
Severity 1	168
Severity 2	89
Severity 3	42
Severity 4	42
Unknown	108
Total	790

Number of Incidents with a Secondary Incident:

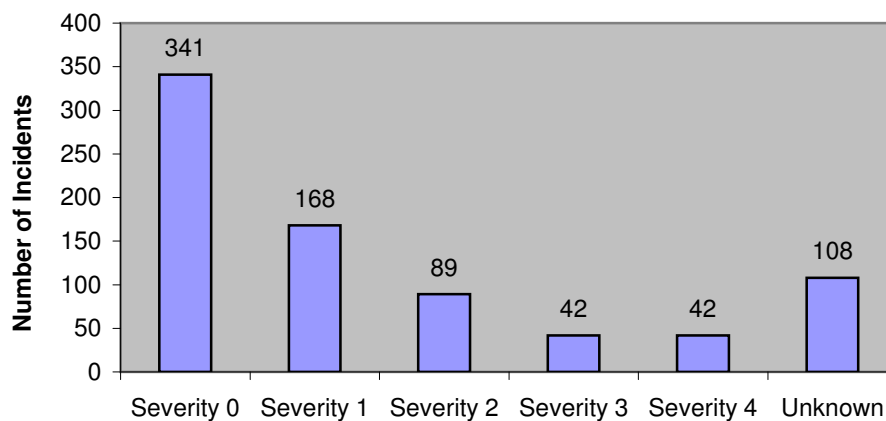
Percentage of Incidents with a Secondary Incident:

Note: A "secondary" incident is one that is the result of an earlier incident.

Percent of Incidents by Severity Level



Number of Incidents by Severity Level



*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR Hazmat w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed

OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

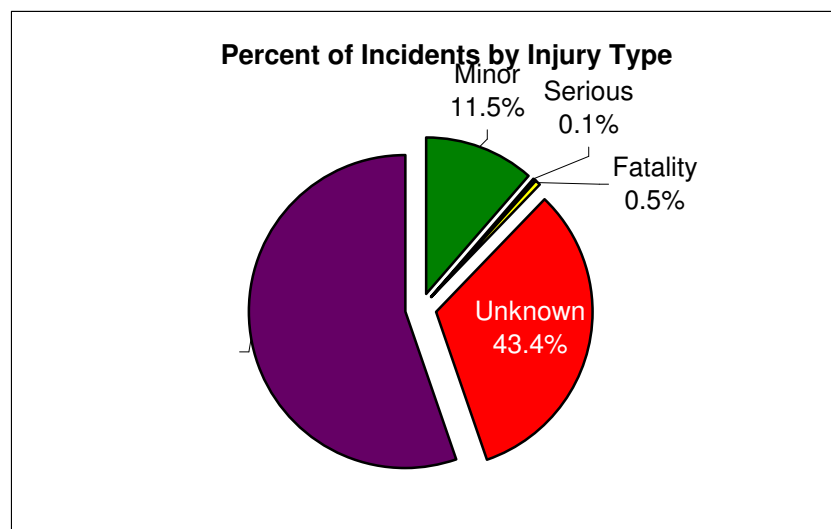
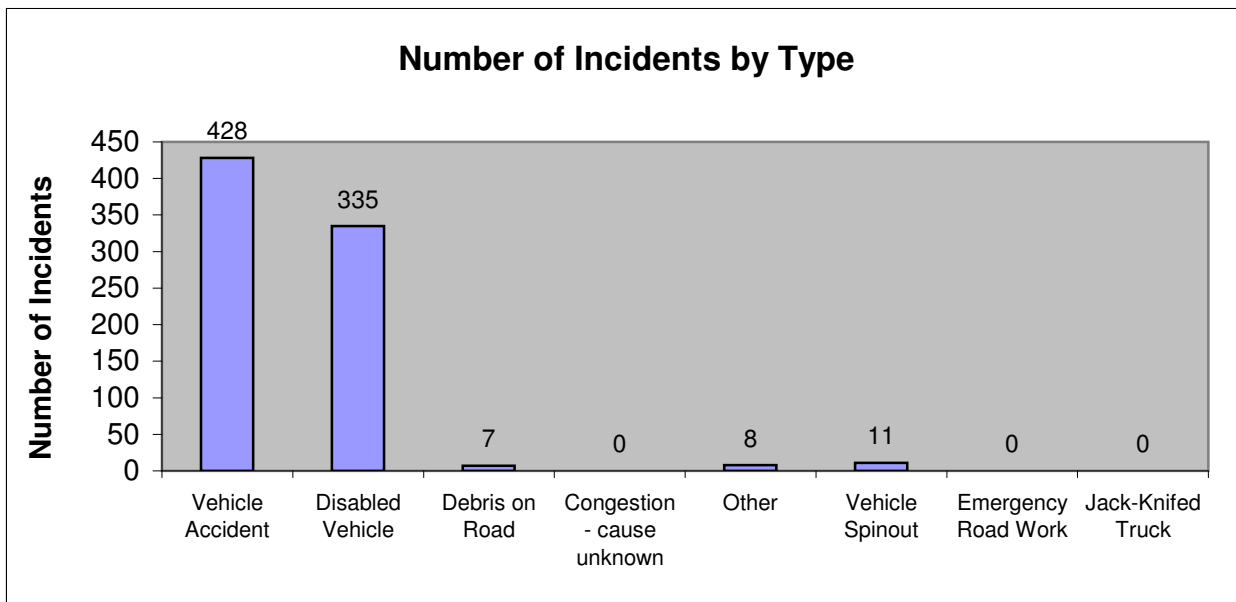


4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	428
Disabled Vehicle	335
Debris on Road	7
Congestion - cause unknown	0
Other	8
Vehicle Spinout	11
Emergency Road Work	0
Jack-Knifed Truck	0
<i>Total Number of Incidents</i>	<i>789</i>

5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	91
Serious	1
Fatality	4
Unknown	257
None	437
<i>Total</i>	<i>790</i>



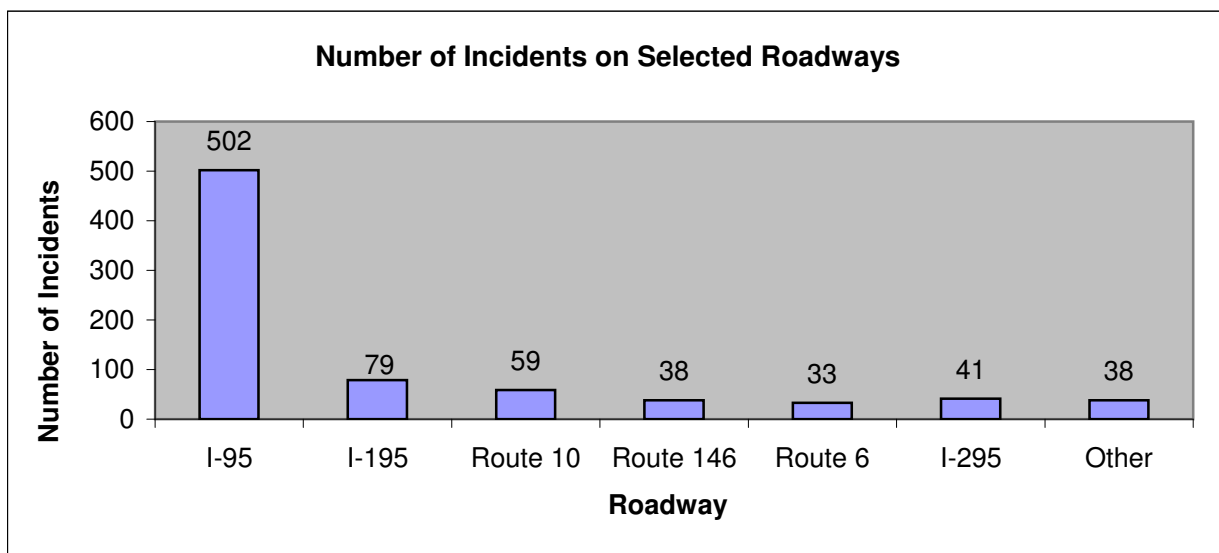
6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	632
Wet	158
Icy	0
Snow-Covered	0
Flooded	0
Other	0
<i>Total</i>	<i>790</i>
Precipitation	
None	669
Light-moderate rain falling	100
Heavy rain falling	21
Light-moderate sleet falling	0
Heavy sleet falling	0
Light-moderate snow falling	0
Heavy snow falling	0
<i>Total</i>	<i>790</i>
Wind	
Calm to Moderate	781
Moderate to Strong	6
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	1
N/A	2
<i>Total</i>	<i>790</i>
Visibility	
Clear	693
Light fog	9
Dense fog	1
Reduced- rain	80
Reduced-snow	0
Poor-heavy rain/sleet	6
Poor-heavy snow	0
Reduced-smoke	0
Other	0
N/A	1
<i>Total</i>	<i>790</i>

7. Incidents Detected by Primary Notifier on Selected Roadways

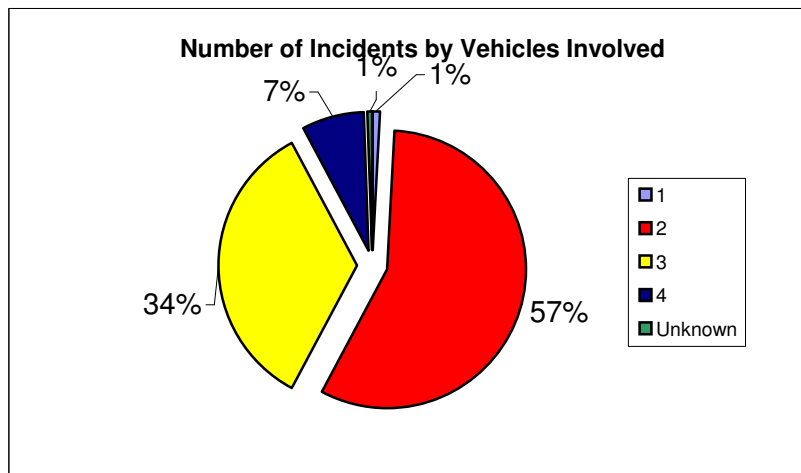
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	42
	State Police Scanner	24
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	13
	Total	79
I-95	TMC Operator	265
	State Police Scanner	141
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	2
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	94
	Total	502
I-295	TMC Operator	8
	State Police Scanner	15
	Local Fire Department	0
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	17
	Total	41

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	17
	State Police Scanner	28
	Local Fire Department	1
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	13
	Total	59
Route 146	TMC Operator	10
	State Police Scanner	19
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	9
	Total	38
Route 6	TMC Operator	14
	State Police Scanner	9
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	10
	Total	33



8. Incidents by Number of Vehicles Involved

No. of Vehicles Involved	No. of Incidents
1	7
2	435
3	264
4	56
5	19
6	3
7	1
8	1
9	0
10+	0
Unknown	4
Total Incidents	790

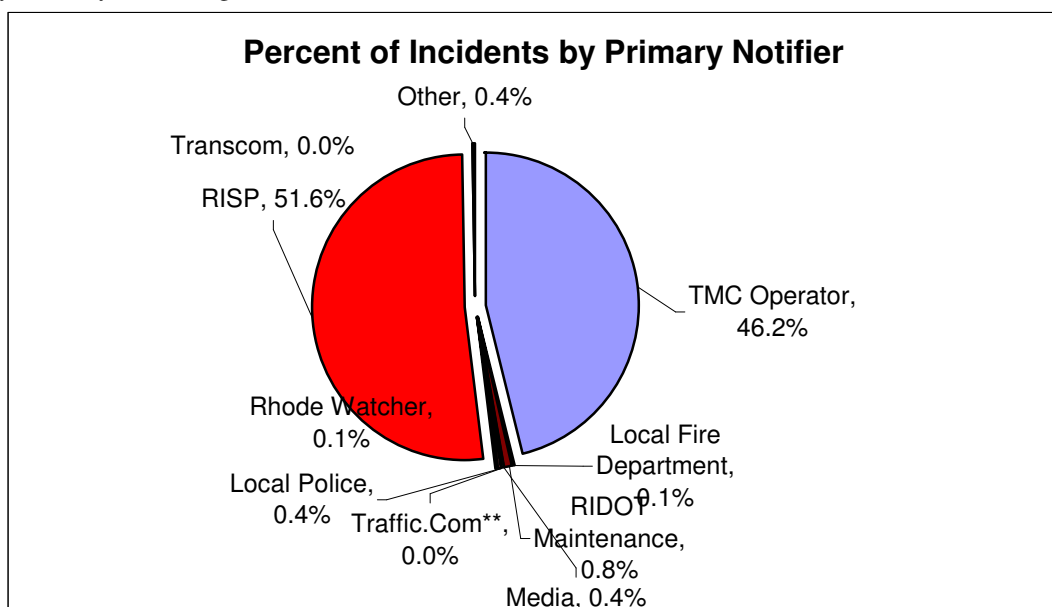


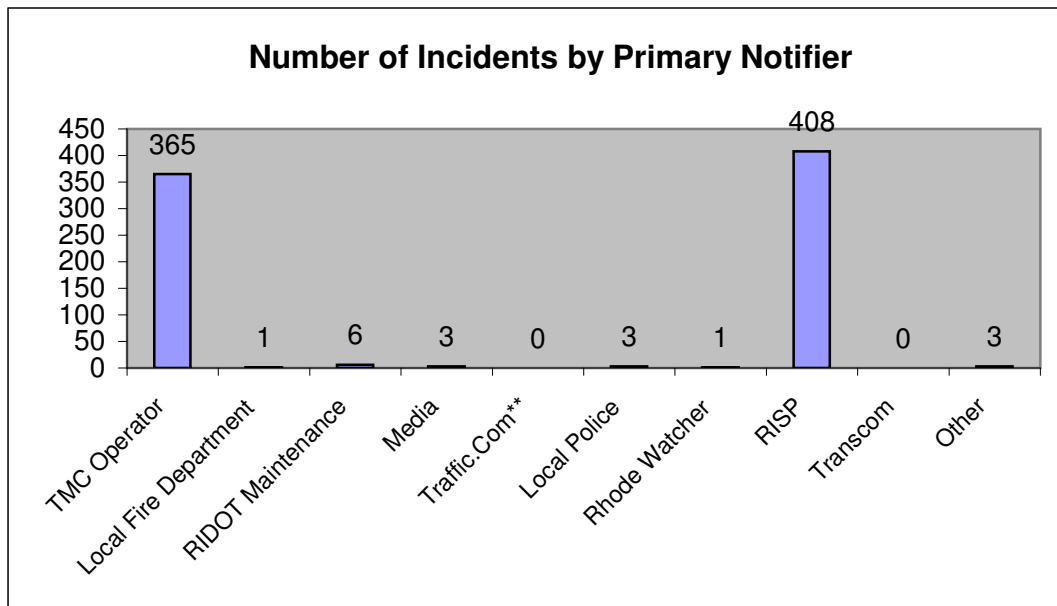
9. Incident Notification

Primary Notifier*	No. of Incidents
TMC Operator	365
Local Fire Department	1
RIDOT Maintenance	6
Media	3
Traffic.Com**	0
Local Police	3
Rhode Watcher	1
RISP	408
Transcom	0
Other	3
Total	790

*First notifier of the incident to TMC

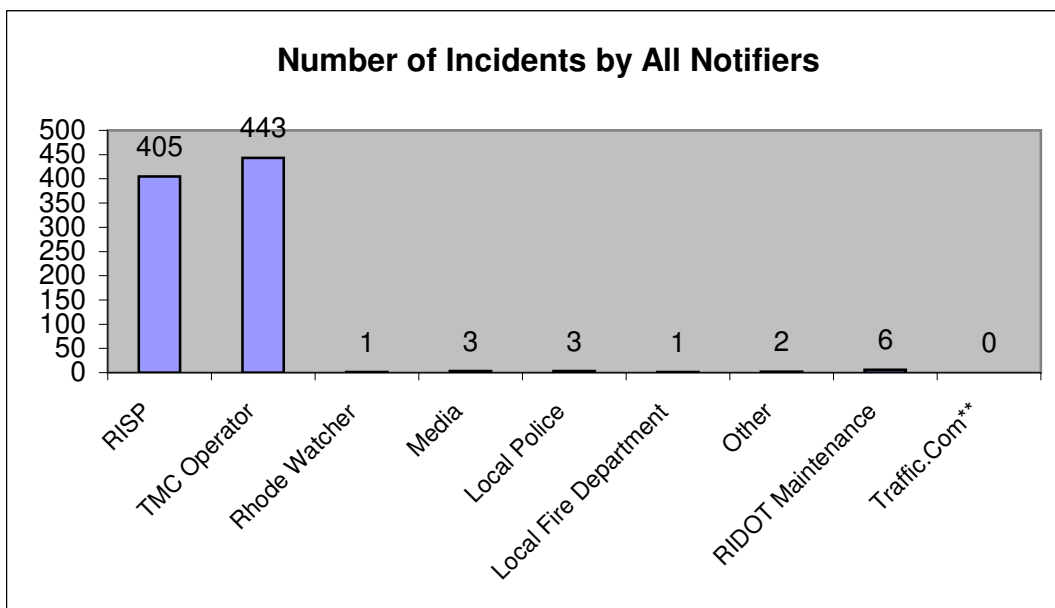
**Formerly Mobility Technologies





Notifier	No. of Incidents
RISP	405
TMC Operator	443
Rhode Watcher	1
Media	3
Local Police	3
Local Fire Department	1
Other	2
RIDOT Maintenance	6
Traffic.Com**	0
Transcom	0

Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".

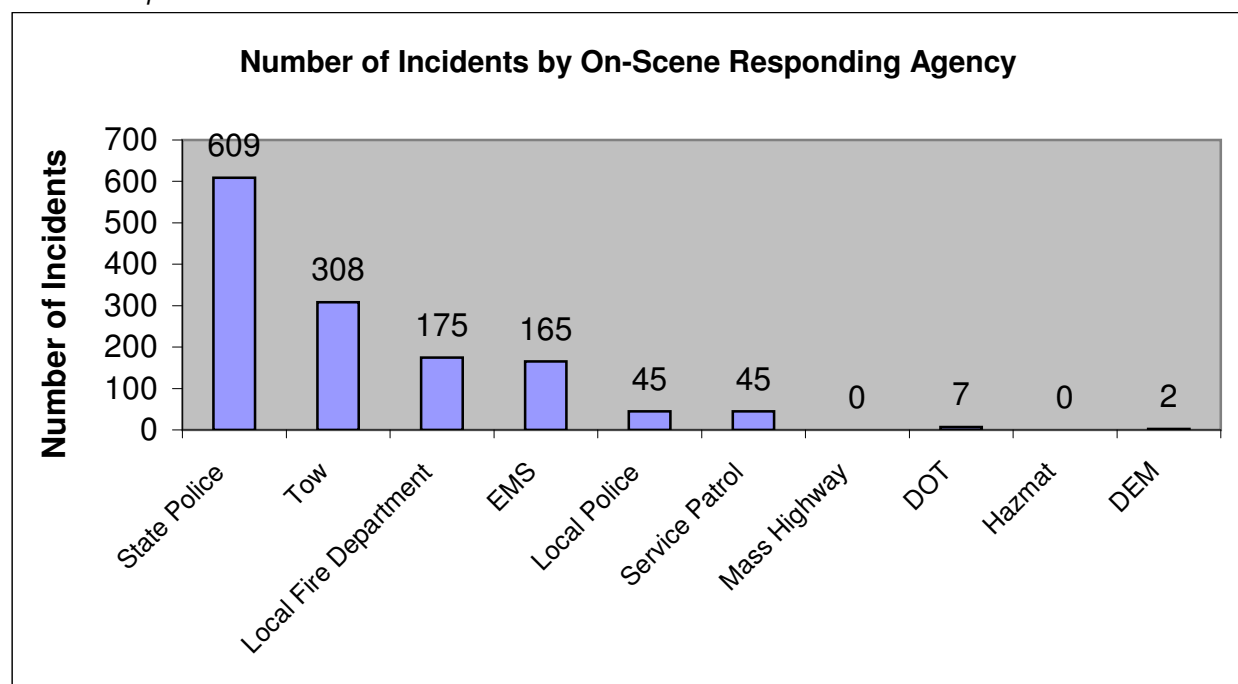


10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	609	77.09%
Tow	308	38.99%
Local Fire Department	175	22.15%
EMS	165	20.89%
Local Police	45	5.70%
Service Patrol	45	5.70%
Mass Highway	0	0.00%
DOT	7	0.89%
Hazmat	0	0.00%
DEM	2	0.25%
Connecticut DOT	0	0.00%
Construction	1	0.13%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	0	0.00%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	392
# of VMS Messages	58
# of DMS Messages	332
# of HAR Messages	203
# of Web Messages	711

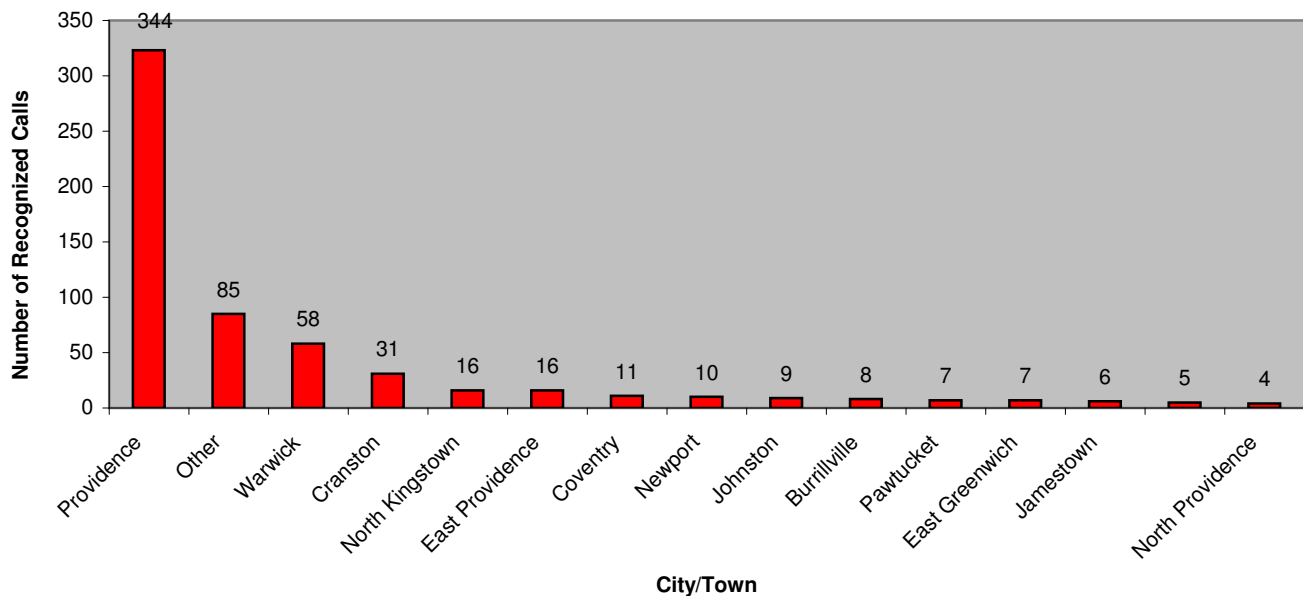
Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.



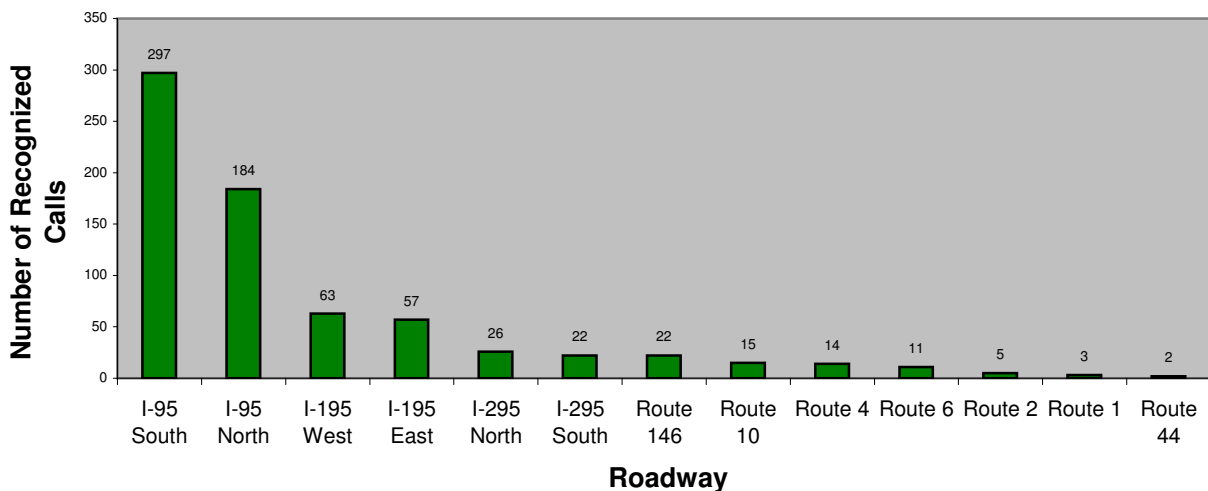
11. 511 and TMC Website Statistics

511 System	
Total Number of Calls	3,041
Average Call Length (seconds)	58.7
Peak Call Day	18-Jan
Peak Call Hour	1/18 8:00
% calls for traffic info	94.1%
% calls for transit info	0.24%
% calls for weather info	5.66%

Number of Recognized Calls to Rhode Island 511 System by City/Town



Number of Recognized Calls to Rhode Island 511 System by Roadway



12. 511 and TMC Website Statistics

<i>TMC Website</i>	
Total Visits	23,969
Total Unique Visitors	10,502
Average Visits per Day	773
Average Visits per Week	5,412
Highest Volume Day	Tues. Jan 30
Highest Volume Time of Day	4 p.m. - 5 p.m.
Total New Visitors	6,980
Total Repeat Visitors	4,447
Average New Visitors per Day	225
Average Repeat Visitors per Day	419
Visitor Repeat Rate	42.3%

Explanation of Website Terms

Unique Visitors - The number of distinct visitors who visited the site. (If you visited the site four times in the month, you would count as one unique visitor.) The number in the Unique Visitors row will not necessarily be the sum of the New Visitors and Repeat Visitors columns, because a single visitor can be both a new visitor and a repeat

New Visitors - The number of visitors who visited the site for the first time ever this month. (If you visited the site once last month and once this month, you would not be counted as a new visitor this month.)

Repeat Visitors - The number of visitors this month who had been to the site sometime before. (If you visited the site once last month and once this month, you would be counted as a repeat visitor. Or, if you visited the site for the first time ever this month and then made a second visit this month, you would be counted as both a new visitor and a repeat visitor.) The number of total repeat visitors is less than the average repeat visitors per day multiplied by the number of days because a repeat visitor may visit the site more than once per day.

Repeat Rate - The percentage of visitors who had been to the site sometime before.

